APPLICANT(S): SERIAL NO.:

ROTII, Shmuel 10/566,628

FILED:

February 1, 2006

Page 2

AMENDMENTS TO THE CLAIMS

Please add or amend the claims to read as follows, and cancel without prejudice or disclaimer to resubmission in a divisional or continuation application claims indicated as cancelled:

 (Previously presented) A display device for producing a color image using four or more primary colors, comprising:

four or more transmissive spatial light modulators to modulate four or more, respective, light beams in accordance with four or more, respective, primary color image components of said color image to produce four or more, respective, modulated light beams; and

a prism block combiner to combine said four or more modulated light beams into a combined light beam.

- (Canceled).
- 3. (Previously presented) The device of claim 1, wherein said prism block combiner comprises:

an X-cube to combine three of said four or more modulated light beams into a three-color light beam; and

a dichroic cube to combine a fourth modulated light beam of said four or more modulated light beams with said three-color light beam.

4. (Original) The device of claim 3, wherein said X-cube comprises two dichroic-coated surfaces, and wherein said dichroic cube comprises a dichroic-coated surface.

APPLICANT(S): SERIAL NO.: ROTH, Shmuel 10/566,628

FILED:

February 1, 2006

Page 3

- 5. (Previously presented) The device of claim 1, wherein said prism block combiner includes five optical elements, each optical element having at least one dichroic-coated surface.
- 6. (Previously presented) The device of claim 1, wherein said prism block combiner comprises:
 - a first dichroic-coated surface to combine first and second modulated light beams of said four or more modulated light beams into a first two-color light beam; and

a second dichroic-coated surface to combine third and fourth modulated light beams of said four or more modulated light beams into a second two-color light beam.

- 7. (Previously presented) The device of claim 6, wherein said prism block combiner comprises a third dichroic-coated surface adapted to combine said first and second two-color light beams.
- 8. (Cancelled)
- 9. (Cancelled)
- 10. (Previously presented) The device of claim 1, wherein at least one of said transmissive spatial light modulators comprises a transmissive liquid crystal display panel.
- 11. (Previously presented) The device of claim 1, wherein said four or more light beams comprise four or more, respective, primary color light beams having spectral ranges corresponding to said four or more primary colors, respectively.
- 12. (Previously presented) The device of claim I comprising a spectrum-splitting arrangement to split light of an illumination source into said four or more primary color light beams.

APPLICANT(S):

ROTH, Shmuel 10/566,628

SERIAL NO.: FILED:

February 1, 2006

Page 4

- 13. (Original) The device of claim 12, wherein said spectrum-splitting arrangement comprises a plurality of dichroic mirrors to separate light of said illumination source into said four or more primary color light beams.
- 14. (Previously presented) The device of claim 11 comprising one or more folding mirrors to direct one or more of said four or more primary color light beams onto one or more of said transmissive spatial light modulators.
- 15. (Previously presented) The device of claim 1, wherein said four more modulated light beams travel substantially the same distance in said prism block combiner.
- 16. (Previously presented) The device of claim 1 comprising a projection lens to project said combined light beam onto a screen.
- 17. (Previously presented) The device of claim 1 comprising a controller able to separately activate said spatial light modulators to produce a four or more transmissive patterns corresponding to four or more primary components, respectively, of a signal representing said color image.
- 18. (Previously presented) The device of claim 17 comprising a converter to convert a three-primary color input signal into the signal representing said color image.
- 19. (Previously presented) A method of producing a color image using four or more primary colors comprising:

modulating four or more primary color light beams using four, respective, transmissive spatial light modulators in accordance with four or more, respective, primary color image components of said color image to produce four or more, respective, modulated light beams; and

combining said four or more modulated light beams by a prism block combiner to produce a combined light beam.

20. (Original) The method of claim 19, comprising splitting light of an illumination source into said four or more primary color light beams.

APPLICANT(S):

ROTH, Shmuel

SERIAL NO.:

10/566,628

FILED:

February 1, 2006

Page 5

- 21. (Canceled)
- 22. (Previously presented) The method of claim 19, wherein combining said four or more modulated light beams comprises:

combining three of said four or more modulated light beams into a three-color light beam; and

combining a fourth modulated light beam of said four or more modulated light beams and said three-color light beam into said combined light beam.

23. (Cancelled)